

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/009755

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC 7 B60K28/02

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 B60K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|----------|---|-----------------------|
| X        | PATENT ABSTRACTS OF JAPAN<br>vol. 2000, no. 01,<br>31 January 2000 (2000-01-31)<br>& JP 11 278092 A (ISUZU MOTORS LTD),<br>12 October 1999 (1999-10-12)<br>abstract | 1,2,4,6,<br>7,11      |
| Y        |   | 3,5,8-10              |
| Y        | PATENT ABSTRACTS OF JAPAN<br>vol. 2000, no. 16, 8 May 2001 (2001-05-08)<br>& JP 2001 010464 A (HONDA MOTOR CO LTD),<br>16 January 2001 (2001-01-16)<br>abstract     | 3,5                   |
|          |   | —/—                   |

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

28 December 2004

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| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT |   |                       |
|--|---|-----------------------|
| Category*  | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
| Y  | PATENT ABSTRACTS OF JAPAN<br>vol. 2000, no. 12,<br>3 January 2001 (2001-01-03)<br>& JP 2000 264097 A (MAZDA MOTOR CORP),<br>26 September 2000 (2000-09-26)<br>abstract                        | 8-10                  |
| X  | US 5 411 452 A (KATAYAMA KAZUYORI)<br>2 May 1995 (1995-05-02)<br>abstract; figures<br>column 1, line 5 - line 13<br>column 2, line 39 - column 3, line 12                                     | 1,6,11                |
| A  | PATENT ABSTRACTS OF JAPAN<br>vol. 1997, no. 02,<br>28 February 1997 (1997-02-28)<br>& JP 08 253054 A (WATANABE MASAE),<br>1 October 1996 (1996-10-01)<br>cited in the application<br>abstract | 1,11                  |
| A  | EP 0 714 803 A (WATANABE MASAE I)<br>5 June 1996 (1996-06-05)<br>abstract; figures  | 1,11                  |
| A  | US 6 543 567 B2 (DELUCA JOAN ET AL)<br>8 April 2003 (2003-04-08)<br>abstract; figures   | 1,11                  |
| A  | US 5 193 640 A (LEE HAE-SEUNG)<br>16 March 1993 (1993-03-16)<br>abstract; figures   | 1,11                  |

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/009755

| Patent document cited in search report |    | Publication date | Patent family member(s) |               | Publication date |
|--|----|------------------|-------------------------|---------------|------------------|
| JP 11278092                            | A  | 12-10-1999       | NONE                    |               |                  |
| JP 2001010464                          | A  | 16-01-2001       | NONE                    |               |                  |
| JP 2000264097                          | A  | 26-09-2000       | NONE                    |               |                  |
| US 5411452                             | A  | 02-05-1995       | JP                      | 6074063 A     | 15-03-1994       |
| JP 08253054                            | A  | 01-10-1996       | NONE                    |               |                  |
| EP 0714803                             | A  | 05-06-1996       | CA                      | 2167322 A1    | 23-11-1995       |
|  |    |                  | CN                      | 1128518 A ,B  | 07-08-1996       |
|  |    |                  | DE                      | 69515808 D1   | 27-04-2000       |
|  |    |                  | DE                      | 69515808 T2   | 20-07-2000       |
|  |    |                  | EP                      | 0714803 A1    | 05-06-1996       |
|  |    |                  | WO                      | 9531349 A1    | 23-11-1995       |
|  |    |                  | US                      | 5797467 A     | 25-08-1998       |
| US 6543567                             | B2 | 21-02-2002       | US                      | 6286617 B1    | 11-09-2001       |
|  |    |                  | US                      | 2002020574 A1 | 21-02-2002       |
|  |    |                  | AU                      | 8320101 A     | 18-02-2002       |
|  |    |                  | WO                      | 0212036 A2    | 14-02-2002       |
|  |    |                  | US                      | 2004226768 A1 | 18-11-2004       |
|  |    |                  | US                      | 2002020575 A1 | 21-02-2002       |
| US 5193640                             | A  | 16-03-1993       | NONE                    |               |                  |

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